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HITSUJIGAOKA, SAPPORO, JAPAN

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Title of Investigation: 28990 Investigation of Environmental  
Change Pattern in JAPAN

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Quarterly Progress Report for Period

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(E76-10172) INVESTIGATION OF ENVIRONMENTAL  
CHANGE PATTERN IN JAPAN: INVESTIGATION OF  
SOIL EROSION IN HOKKAIDO WHICH IS CAUSED BY

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Subject THAWING OF SOIL WATER IN LATE SPRING

Unclass

Quarterly Progress Report, (Science Univ. of G3/43 00172

1. Investigation of Soil Erosion in Hokkaido which is caused by

Thawing of Soil Water in Late Spring

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We have received two kinds of scene, Obihiro and Monbetsu, on June 11, 1975. It is impossible from those imageries to examine the soil erosion caused by thawing of soil water. However, we are trying to study on following problems.

LANDSAT imageries were compared with conventional soil maps, because identification of soil types from the imageries is necessary to develop this investigation. Conventional soil maps are made on the basis of soil profile observation, on the other hand LANDSAT can detect only the surface of soils. Therefore, it was found that they did not always agree well. (See the figure.)

According to the imageries from MSC<sup>U</sup> on Aug. 22, 1975, excess-moisture injury of crops were recognized along the run-off pattern of rain water. As it seems to be reasonable to assume that the run-off pattern of rain water is similar to that of soil erosion by thawing water, we shall interpret LANDSAT imageries about the areas of damaged crops.

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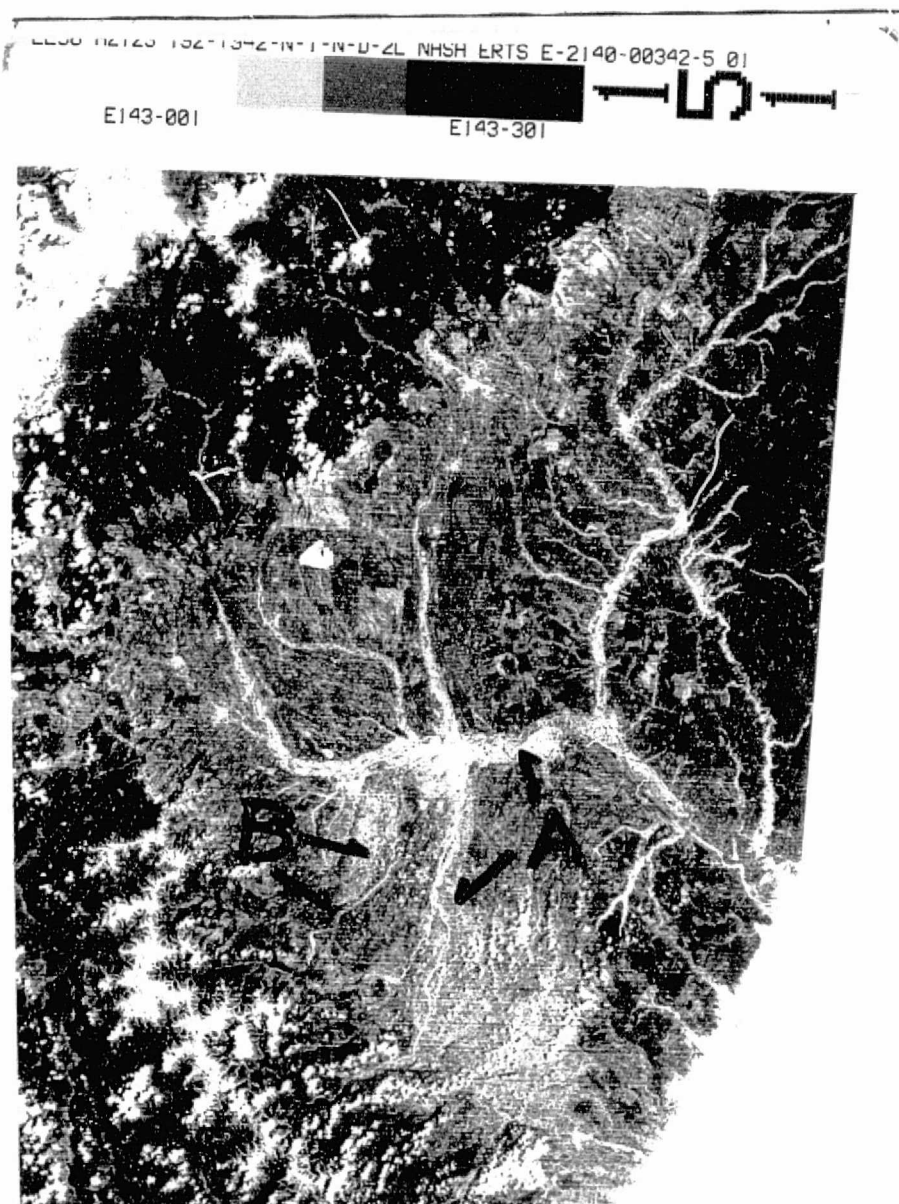


Fig. The case showing different response of reflection within the same soil type.

(A: Alluvial Soil, B: Andosol-Brown. Using 5-band.)

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